

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/001229

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16L1/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 721 411 A (RECALDE ET AL) 26 January 1988 (1988-01-26) abstract; figures column 30, line 54 - column 31, line 55	1-8, 10-19
P, X	WO 2004/068012 A (STOLT OFFSHORE LIMITED; BURSAUX, GABRIEL, ANDRE; COWIE, DAVID, ALEXAND) 12 August 2004 (2004-08-12) abstract; figure 3 page 31, line 4 - line 6	1-19
X	US 5 975 802 A (WILLIS ET AL) 2 November 1999 (1999-11-02) cited in the application abstract; figures	1
X	US 4 721 410 A (RECALDE ET AL) 26 January 1988 (1988-01-26) abstract; figures	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

27 July 2005

Date of mailing of the international search report

04/08/2005

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Information on patent family members

International Application No
PCT/GB2005/001229

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4721411	A	26-01-1988	US — 4687376 A	18-08-1987
			AU 594879 B2	15-03-1990
			AU 1662788 A	11-08-1988
			AU 593444 B2	08-02-1990
			AU 1662888 A	11-08-1988
			AU 594575 B2	08-03-1990
			AU 1662988 A	11-08-1988
			AU 569991 B2	25-02-1988
			AU 4641385 A	06-03-1986
			BR 8504114 A	17-06-1986
			CA 1251053 A1	14-03-1989
			CA 1261310 A2	26-09-1989
			CA 1261156 A2	26-09-1989
			CA 1261157 A2	26-09-1989
			DK 398585 A	01-03-1986
			ES 8705322 A1	16-07-1987
			ES 8708044 A1	16-11-1987
			GB 2163827 A , B	05-03-1986
			GB 2199631 A , B	13-07-1988
			GB 2199632 A , B	13-07-1988
			NL 8501990 A	17-03-1986
			NO 853415 A , B ,	03-03-1986
			NO 882166 A , B ,	03-03-1986
			US 4723874 A	09-02-1988
			US 4789108 A	06-12-1988
			US 4820082 A	11-04-1989
			US 4984934 A	15-01-1991
			US 4917540 A	17-04-1990
			US 4961671 A	09-10-1990
WO 2004068012	A	12-08-2004	WO 2004068012 A2	12-08-2004
US 5975802	A	02-11-1999	AU 696337 B2	10-09-1998
			AU 4088796 A	25-07-1996
			BR 9600055 A	21-01-1998
			GB 2296956 A , B	17-07-1996
			NO 960135 A	15-07-1996
US 4721410	A	26-01-1988	GB 2213552 A , B	16-08-1989